

DOCKET NO.: NNI_0005_REDE_US02
Application No.: 10/672,833
Office Action Dated: July 5, 2011

PATENT

REMARKS

Claims 1-5 and 7-69 are pending in this application upon entry of the above amendments. Claims 1-5, 7-43 and 67-69 stand rejected under 35 U.S.C. §112, claims 1-5, 7-21, 23, 24, 26-30, 35-51, 53-62 and 66-69 stand rejected under 35 U.S.C. 102(e), and claims 22, 25, 31-34, 52 and 63-65 stand rejected under 35 U.S.C. 103(a).

Applicants respectfully request reconsideration and withdrawal of the rejections based on the foregoing amendments and the following remarks.

Summary of Examiner Interview

Applicants thank Examiner Hopkins for taking the time to conduct a telephonic interview on August 22, 2011. During the interview, the undersigned provided distinctions between the claims and the cited reference U.S. Pub. No. 2003/0050527 to Fox et al. (“Fox”). In particular, the undersigned pointed out that the claims are directed to a circuit pad that is adapted to reduce stimulation induced by a magnetic stimulation device, whereas Fox simply teaches a magnetic stimulation device that can be configured for particular levels of stimulation. While no agreement was reached, Examiner Hopkins indicated that she would review our clarifying amendments and remarks, made herein, upon receipt of our response.

Rejection under 35 U.S.C. §112

Claims 1-5, 7-69 stand rejected under 35 U.S.C. §112 for allegedly failing to particularly point out and distinctly claim the subject matter.

Applicants would like to thank the Examiner for indicating that claims 44-66 would be allowable if amended to overcome the rejection under 35 U.S.C. §112. In particular, claims 44-66 are rejected under § 112 because the recitation “wherein the connector provides an interface with the magnetic stimulation device” is allegedly unclear. Applicants have amended the claims to remove this feature. Thus, Applicants respectfully submit that claims 44-66 are in condition for allowance.

With regards to claims 1, 26, 38, and 67, the office action asserts that the magnetic stimulation device in these claims appears to be separate from the circuit pad in Figures 5 and 6, and therefore, the circuit pad does not comprise both a conductor and a magnetic stimulation device. To clarify this, Applicants have amended claims 1 and 67.

With regards to claims 26 and 38, these claims also do not recite that the circuit pad comprises a magnetic stimulation device. Claim 26 recites that magnetic flux density is *created* by a magnetic stimulation device. Claim 38 recites that the circuit pad is placed along a direction of an electric field vector *induced* by the magnetic stimulation device. Nowhere does either of claims 26 or 38 recite that the magnetic stimulation device is part of the circuit pad. Thus, Applicants agree with the examiner's assessment that the claims are consistent with the specification, and the magnetic stimulation device in these claims is separate from the circuit pad as shown in Figures 5 and 6.

With regards to claims 1 and 67 the office action asserts that the recitation "wherein the connector provides an interface with the magnetic stimulation device" is unclear because paragraph [0063] of the Specification describes the connector connected to the conductors. However, the Specification provides examples of the connector and the interface it may have for interfacing with a magnetic stimulation device. For example, at paragraph [0033], the Specification describes that a connector permits components of a system to be readily attached and disconnected therefrom (e.g., system 100 shown in the Figures). The connection may provide an interface to a magnetic stimulation device, such as through its connection to stimulation circuit 101. Thus, Applicants submit that the claims are consistent with the specification and are not unclear.

Accordingly, withdrawal of the rejections under §112 is respectfully requested.

Rejection under 35 U.S.C. §102(e)

Claims 1-5, 7-21, 23, 24, 28-30, 35-42, and 67-69 stand rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Pub. No. 2003/0050527 to Fox et al. ("Fox"). Applicants respectfully disagree. The claims are directed to a circuit pad that is adapted to reduce

stimulation induced by a magnetic stimulation device, whereas Fox simply teaches a magnetic stimulation device that can be configured for particular levels of stimulation.

The claims are directed to systems and methods for reducing discomfort in a patient. For example, claims 1-43 are directed to a magnetic stimulation device, a circuit pad, conductor, and connector. The conductor reduces stimulation caused by a magnetic stimulation device. For example, the conductor can be used to reduce undesirable and painful scalp stimulation caused by a magnetic stimulation device. Further, the claims recite a connector in communication with the conductor, wherein the connector provides an interface to the magnetic stimulation device. Similarly, claims 67-69 are directed to a ferrite material for reducing the magnetic stimulation generated by the magnetic stimulation device. In particular, claim 67 is directed to a magnetic stimulation device for generating therapeutic stimulation at a first location, where the ferrite material is adapted to reduce stimulation at a second location.

Fox teaches copper windings, a coil, and a cabling that connects the copper windings to the coil, which all constitute components of a magnetic stimulation device. However, Fox does not teach a conductor or material separate from a magnetic stimulation device. Rather, Fox teaches a magnetic stimulation device only. Whether Fox's magnetic stimulation device may be configured to reduce stimulation is irrelevant to the claims, which recite a conductor that reduces stimulation independently induced by the magnetic stimulation device for reducing stimulation. Thus, Fox does not teach a conductor or material that can reduce undesirable and painful scalp stimulation caused by the magnetic stimulation device, where the magnetic stimulation device is independently capable of inducing stimulation.

Applicants have made clarifying amendments to the claims consistent with the distinctions made in the Examiner Interview.

The distinction of having a conductor that can reduce stimulation caused by the magnetic stimulation device, that is not part of the magnetic stimulation device, is not a trivial matter. Simply modifying the arrangement of the windings of Fox's magnetic stimulation device does not correspond to the use of the claimed conductor for reducing stimulation from a magnetic stimulation device. Fox admits at paragraph [0150] that its technique of the coil with windings

wound around the coil has an impact on the coil that generates the field, acknowledging that its technique “comes at the expense of some focusing ability, and coil inductance and heating.” The use of a separate conductor, on the other hand, may provide flexibility to position the conductor to minimize the limitations of Fox’s magnetic stimulation device, for example.

Thus, Fox nowhere teaches a conductor or material that reduces stimulation induced by the magnetic stimulation device, or a connector in communication with the conductor that provides an interface to the magnetic stimulation device. Fox does not teach or suggest the same structure recited in claims 1-5, 7-21, 23, 24, 26-30, 35-51, 53-62 and 66.

Accordingly, Applicant respectfully requests withdrawal of the rejection of claims 1-5, 7-21, 23, 24, 26-30, 35-51, 53-62 and 66 under 35 U.S.C. §102(e) over Fox.

Rejection under 35 U.S.C. §103(a)

Claim 22 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Fox in view of U.S. Pub. No. 2001/0018547 to Mechlenburg *et al.* (“Mechlenburg”). Claim 25 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Fox. Claim 26 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Fox in view of U.S. Patent No. 6,984,854 (“Ishikawa”). Claims 31-34 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Fox in view of U.S. Patent No. 6,477,410 to Henley *et al.* (“Henley”). Claim 43 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Fox in view of U.S. Pub. No. 6,500,110 (“Davey”).

For at least the reasons discussed above with respect to the rejection of claims 1-5, 7-21, 23, 24, 26-30, 35-51, 53-62 and 66-69 under 35 U.S.C. 102(e) over Fox, applicant respectfully requests withdrawal of the rejection of claims 22, 25, 26, 31-34, and 43 at least by virtue of their dependency from allowable independent claims.

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Conclusion

In view of the foregoing, Applicants respectfully submit that the claims are allowable and that the present application is in condition for allowance. Reconsideration of the application and an early Notice of Allowance are respectfully requested. In the event that the Examiner cannot allow the present application for any reason, the Examiner is encouraged to contact the undersigned at (215) 558-5716 to discuss resolution of any remaining issues.

Date: October 11, 2011

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